

AMENDMENTS TO THE SPECIFICATION WITH MARKINGS TO SHOW CHANGES MADE

[0020] -- The drawing shows two long-distance transportation means, namely a highway truck 1 and a railway train 2 in substantial parallel relationship. Provided between the three-level high-rise storage rack 3 and the railway train 2 is a transfer zone 4 for receiving the cargo. Disposed above the railway train 2 is a hoist 5, namely a gantry crane, having a transverse rail 6 for movement of the trolley 7 with the spreader or gripper 8 from the highway truck via the railway train to the transfer zone 4. The hoist 5 can be moved along rails 9 which extend along the rails 10 of the railway train. Provided between the high-rise storage rack 3 and the transfer zone 4 is a further hoist 11 which can move along a rail 12. The hoist 11 further includes two telescopic arms 13 on which a not shown spreader 8 can travel from the transfer zone 4 into the high-rise rack 3. The telescopic arm 13, which can additionally travel vertically along vertical supports 17, enables the not shown ~~spreaders~~ spreader to move from the transfer zone 4 to and into the respective bay 14, 15, 16 of the high-rise rack. The further hoist 11 includes two vertical supports 17 behind one another which are interconnected at the upper end by a cross member, on one hand, whereas the telescopic arms 13 are secured to a cross member which is movable upwards and downwards along the vertical supports. The arms may also be constructed as displaceable arms.--.

[0023] -- The container 18, whether on the highway truck 1 or railway train 2, whereby several railway trains as well as several highway trucks may be disposed behind and next to one another, is identified either by a reader on the spreader 8 or also by hand and stored in a data processing system. Either the identification establishes already the destination location and the receiver, or this information must be inputted by hand. Taking into consideration the next train intended for the destination location, the container 18 is deposited either upon the railway train 2, when unloaded from the highway truck, or in the transfer zone 4.

When removing the container 18 from the highway truck, the hoist 5 must be monitored by personnel. The ~~spreaders~~ spreader 8 of the ~~hoists~~ hoist 5 and the unillustrated spreader of the further ~~hoists~~ hoist 11 include sensors S so as to facilitate the insertion of the holding pins $8a$ in the respective receptacles. However, it should be taken into account that the highway truck not necessarily is positioned in parallel relationship to the rails 9 for the hoist 5 so that a rotation of the spreader 8 about a vertical axis $[[a_2]]$ may be required. When the container 18 is unevenly loaded and the container 18 is not arranged in parallel relationship to the ground, also an additional rotation about a horizontal axis $[[a_1]]$ may be required. After being lifted, the container is aligned into a position parallel to the rails 9 and generally horizontal. When intending to transport the container 18 into the intermediate storage facility, the further hoist 11 is operated by the data processing system to move in front of the container 18, to lower the spreader 8 and to lift the container 18. The ~~spreader 8~~ of the further hoist 11 is moved until the container 18 is positioned with its center of gravity $42a$ above the rail 12. Subsequently taking place is a horizontal conveyance to a location predetermined by the data processing system whereupon the spreader 8 of the further hoist 11 is optionally moved upwards, with respective markings being provided on the vertical supports for cooperation with sensors S on the telescopic arm 13. Respective markings are provided on the bays for positioning of the further hoist 11 in front of the individual bays and cooperate with sensors $[[S_1]]$ which are provided on the vertical supports and on the telescopic arms. The container 18 is then moved into the respective bay and lowered.--

[0024] -- Loading of a railway train involves a withdrawal of a selected container 18 from the high-rise storage rack by the further hoist 11, as controlled by the data system, wherein the data processing system controls the travel of the further hoist to the individual bay 14, 15, 16 as well as the movement pattern for the container, i.e. lifting, moving thereof with its center of gravity $42a$ above the rail 12, then lowering and transport in lowered position to a predetermined location

in the transfer zone 4 and lowering of the container in the transfer zone. The containers 18 are stored one after the other in the transfer zone 4 in accordance with logistics demands, for example, when individual railway cars should be disengaged, or when the specific demands of unloading devices at other railway stations should be taken into account. After arrival of the railway train, the containers 18 can be transported by the hoist 5 from the transfer zone or also from the highway truck onto the railway train. The movement of the cargo 18 on the further hoist 11 and the movement of the further hoist itself are inhibited when the hoist is in neighboring position. It is also conceivable, when several railway trains are positioned next to one another, to execute a transfer from one railway train to a further railway train. The number of hoists and further hoists as well as the length of the transfer zone 4 and the intermediate storage facility 3 depend on the intended loading times and the length of the long-distance transportation means to be loaded.--.